



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,783	01/18/2002	Jason F. Hunzinger	440402000700	4213

25224 7590 07/07/2004
MORRISON & FOERSTER, LLP
555 WEST FIFTH STREET
SUITE 3500
LOS ANGELES, CA 90013-1024

EXAMINER

PEREZ, ANGELICA

ART UNIT PAPER NUMBER

2684

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,783

Applicant(s)

HUNZINGER, JASON F.

Examiner

Angelica M. Perez

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 and 34-37 is/are allowed.
- 6) ☒ Claim(s) 1-14, 19-24, 28-33 and 38 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claim 6-8 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and in any intervening claims.

Claim 34-37 are allowed.

Prior art has not been found that suggests or renders obvious the limitations of independent claims 15 and 34 disclosing the limitations to a rescuer procedure that follows the detailed order followed in the claim.

Claims 16-18 and 35-37 are allowed for the same reasons of at least those recited for independent claims 15 and 34.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before

Art Unit: 2684

November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2,19-21 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito (Saito, Atsushi; US Patent No.: 6,580,919 B1).

Regarding claims 1, 19, 20 and 38, Saito teaches where in a system; where the comprising a network (figures 3 and 4; where a BS and MS are part of a network in a system) and at least one mobile station (MS) (figure 4), means (figures 3 and 4; where the mobile station and base station provide the means for the execution of the method; e.g., items 12, 15, 16, 17, etc.) and processor (column 4, lines 60-63; where "processing procedure" corresponds to a "processor" processing the method; moreover, memory and executing means perform process methods) for enabling communications with the at least one MS (figures 3 and 4; where it is inherent for a base station to enable the establishing of communication between two mobile stations), the at least one MS having a connection with the network that is capable of becoming a potentially failing connection and the system for executing a rescue procedure for rescuing the potentially failing connection upon detection of the potentially failing connection (column 4, lines 5-8; e.g., "preventing call disconnection"), a method for computing a mean rescue transmission output power level of a MS having a potentially failing connection (figure 6, item S1 and column 4, lines 23-26; e.g., "calculating an average"), the method comprising: determining a mean rescue receive power level for the MS when the MS begins transmitting during the

Art Unit: 2684

rescue procedure (column 4, lines 23-26); and computing the MS's mean rescue transmission output power level by adding a delta power level to a negative of the mean rescue receive power level (column 4, lines 26-32; where "correction value" corresponds to a "delta value" and figure 6, item S2; where), the delta power level inherently including an offset representing open-loop power control (column 4, lines 11-14).

Regarding claims 2 and 21, Saito teaches all the limitations of claims 1 and 20, respectively. Saito further teaches where the MS's mean rescue transmission output power level is recomputed during execution of the rescue procedure as the MS's mean rescue receive power level changes (column 4, lines 35-37; e.g., "renewed" corresponding to "recomputed").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Gandhi (Gandhi et al.; US Pub. No.: 2003/0,022,630 A1).

Regarding claims 3 and 22, Saito teaches all the limitations of claims 1 and 20, respectively.

Saito does not explicitly teach where the delta power level includes a pre-rescue power delta computed by subtracting the MS's mean receive power level from the MS's transmit power level, the MS mean receive power level and the MS transmit power level measured at a time power control bits were received by the MS prior to detection of the potentially failing connection, the pre-rescue power delta including the offset.

In related art concerning reverse-link power control, Gandhi teaches where the delta power level includes a pre-rescue power delta computed by subtracting the MS's mean receive power level from the MS's transmit power level, the MS mean receive power level and the MS transmit power level measured at a time power control bits were received by the MS prior to detection of the potentially failing connection, the pre-rescue power delta including the offset (paragraph 0010; lines 1-9; where the "access probe refers to a transmission during an access attempt").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Saito's system with Gandhi's pre-rescue power delta in order to keep track of the system's performance before a failing condition occurs so that later, the rescuing task can increase its likelihood of success.

Art Unit: 2684

5. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Zeira (Zeira et al.; US Patent No.: 6,606,343 B2).

Regarding claim 9, Saito teaches all the limitations of claim 1.

Saito does not teach where the delta power level includes a rescue delay compensation value that is multiplied by a coefficient that increases as a delay time increases, the delay time representing a time interval beginning at the time power control bits were received by the MS prior to detection of the potentially failing connection, and ending at an end of the rescue procedure

In related art concerning an outer loop/weighted open-loop power control apparatus for a base station, Zeira teaches where the delta power level includes a rescue delay compensation value that is multiplied by a coefficient that increases as a delay time increases, the delay time representing a time interval beginning at the time power control bits were received by the MS prior to detection of the potentially failing connection, and ending at an end of the rescue procedure (columns 6 and 7, lines 48-67 and 1-22).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Saito's rescue method with Zeira's multiplying the offset by a coefficient whose value is dependent on and directly proportional to a delay time in order to increase the likelihood of rescuing calls and optimizing power utilization by multiplying the offset by a coefficient dependent/proportional on a delay time.

Regarding claims 10 Saito in view of Zeira teaches all the limitations of claims 9. Zeira further teaches where the rescue delay compensation value is

Art Unit: 2684

recomputed at fixed time intervals during execution of the rescue procedure (column 7, lines 24-28; where the target SIR is updated every block, therefore, the rescue delay compensation value is updated, "recomputed", too).

Regarding claims 11, Saito in view of Zeira teaches all the limitations of claims 9. Zeira further teaches where the rescue delay compensation value or the coefficient is communicated to the MS in a message prior to a start of the rescue procedure (column 6, lines 55-60).

Regarding claim 12, Saito in view of Zeira teaches all the limitations of claims 1. Zeira further teaches where the delta power level includes a pre-determined value selected to balance a time needed to complete the rescue procedure and the MS's mean rescue transmission output power level (column 6, lines 48-60; where the "CONSTANT VALUE" corresponds to a pre-determined value).

Regarding claim 13, Saito in view Zeira teaches all the limitations of claims 12. Zeira further teaches where the pre-determined value is communicated to the MS in a message prior to a start of the rescue procedure (column 6, lines 55-60).

Regarding claim 14, Saito in view of Zeira teaches all the limitations of claims 12. Zeira further teaches where the pre-determined value includes the offset (column 6, lines 48; "path loss estimate").

Art Unit: 2684

6. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Gandhi as applied to claim 3 above, and further in view of Zeira (Zeira et al.; US Patent No.: 6,606,343 B2).

Regarding claims 4, 23 and 28, Saito in view of Gandhi teaches all the limitations of claims 3, 22, and 20, respectively.

Saito in view of Gandhi does not teach of multiplying the offset by a coefficient whose value is dependent on and directly proportional to a delay time, the delay time representing a time interval beginning at the time power control bits were received by the MS prior to the detection of the potentially failing connection, and ending at the start of the rescue procedure.

In related art concerning an outer loop/weighted open-loop power control apparatus for a base station, Zeira teaches of multiplying the offset by a coefficient whose value is dependent on and directly proportional to a delay time, the delay time representing a time interval beginning at the time power control bits were received by the MS prior to the detection of the potentially failing connection, and ending at the start of the rescue procedure (columns 6 and 7, lines 61-67 and 1-22; e.g., "time slot delay" corresponding to "delay time").

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Saito's and Gandhi's rescue method with Zeira's multiplying the offset by a coefficient whose value is dependent on and directly proportional to a delay time in order to increase the likelihood of rescuing calls and optimizing power utilization by multiplying the offset by a coefficient dependent/proportional on a delay time.

Regarding claims 5 and 24, Saito in view of Gandhi and further in view of Zeira teaches all the limitations of claims 3 and 23, respectively. Zeira further teaches where the coefficient is communicated to the MS in a message prior to the start of the rescue procedure (column 6, lines 55-60).

Regarding claim 29, Saito in view of Gandhi and further in view of Zeira teaches all the limitations of claim 28. Zeira further teaches where the rescue delay compensation value is recomputed at fixed time intervals during execution of the rescue procedure (column 7, lines 24-28; where the target SIR is updated every block, therefore, the rescue delay compensation value is updated, "recomputed", too).

Regarding claim 30, Saito in view of Gandhi and further in view of Zeira teaches all the limitations of claim 28. Zeira further teaches where the rescue delay compensation value or the coefficient is communicated to the MS in a message prior to a start of the rescue procedure (column 6, lines 55-60).

Regarding claim 31, Saito in view of Gandhi teaches all the limitations of claim 20. Zeira further teaches where the delta power level includes a pre-determined value selected to balance a time needed to complete the rescue procedure and the MS's mean rescue transmission output power level (column 6, lines 48-60; where the "CONSTANT VALUE" corresponds to a pre-determined value).

Art Unit: 2684

Regarding claim 32, Saito in view of Gandhi and further in view of Zeira teaches all the limitations of claim 31. Zeira further teaches where the pre-determined value is communicated to the MS in a message prior to a start of the rescue procedure (column 6, lines 55-60).

Regarding claim 33, Saito in view of Gandhi and further in view of Zeira teaches all the limitations of claim 31. Zeira further teaches where the pre-determined value includes the offset (column 6, lines 48; "path loss estimate").

Art Unit: 2684


Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
(Examiner)


NICK CORSARO
PATENT EXAMINER

Art Unit 2684

June 27, 2004